LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) Method for determining physico-chemical properties of a three-dimensional body, said method comprising the following steps:

a) generating a first database (**BDS**) that contains first data on bores intersecting said three-dimensional body, said first data defining the location and physico-chemical properties of the three-dimensional body at said bores,
b) defining a first surface (**T1**) in aspatial centre of the three-dimensional body by triangulation, so that said first surface (T1) extends along two main directions of said three-dimensional body,
c) defining on said first surface (**T1**) a cluster of points (**NPS**) generated with regular spacings in said two main directions of the three-dimensional body,
d) generating, by creating linked triangles between the points of said cluster of points (**NPS**), a second surface (**T2**) constituted by said triangles,
e) calculating, by an interpolation method and based on said first data in the first database (**BDS**), second data defining calculated physico-chemical properties of the three-dimensonal body at said points of said cluster of points (**NPS**),
f) generating a second database (**BDT2**) using the triangles constituting said second surface (**T2**), so that said second database contains, for each triangle constituting said second surface (**T2**), the coordinates of the vertices of the triangle, the second data defining calculated physico-chemical properties of the three-dimensional body at said vertices of the triangle, and the area of the triangle in space,
g) generating reports with information from the second database (**BDT2**), and
h) generating three-dimensional graphical representations based on the second database (**BDT2**).

2. (Original) Method according to claim 1, wherein the first database (**BDS**) comprises the following data:

- data on coordinates defining the position of the intersection of each bore (s1, s2) with the three-dimensional body, wherein the coordinates can either define a single point determining the centre of the body at said bore or an interval determining the beginning and the end of the three-dimensional body at said bore,

and

- the data on physico-chemical properties of the three-dimensional body (data 1, data at each bore.

3. (Currently Amended)Method according to ~~any of the previous claims~~ claim 1, wherein the first surface (**T1**) is generated by applying the triangulation method based on the coordinates of the centres of the bores, and, optionally, further based on three-dimensional interpretation of known data of this body and previous knowledge of a usual shape of the corresponding type of body.

4. (Currently Amended) Method according to ~~any of the previous claims~~ claim 1, wherein the cluster of points (**NPS**) is generated by an algorithm based on regular spacings on the surface.

5. (Currently Amended) Method according to ~~any of the previous claims~~ claim 1, wherein in step d), a triangulation algorithm based on the cluster of points (**NPS**) is used to generate the second surface (**T2**) .

6. (Currently Amended) Method according to ~~any of the previous claims~~ claim 1, wherein, in step e), the second data for each point of said cluster of points (**NBS**) are calculated based on the first data corresponding to surrounding bores.

7.(Original) Method according to claim 6, wherein for calculating said second data for any point of said cluster of points (**NBS**), an interpolation method is used by which the second data for said point are set to be equal to the corresponding first data corresponding to the nearest bore.

8.(Original;) Method according to claim 6, wherein for calculating said second data, for any point of said cluster of points (**NBS**), said second data for said point are set to be the arithmetical mean of corresponding first data corresponding to bores within a maximum distance, weighted by a power of the inverse of the distance between said point and the respective bore.

9.(Original) Method according to claim 6, wherein for calculating said second data, for any point of said cluster of points (**NBS**), a geostatistical method, such as Kriging, is used.

10.(Currently Amended) Method according to ~~any of the previous claims~~ claim 1, wherein the graphical representation generated in stage h) from the second database (**BDT2**) is performed by graphical software that allows the three-dimensional representation of the shape and properties of the three-dimensional body.

11.(Currently Amended) Method according to ~~any of the previous claims~~ claim 1, said method being a method for determining the mineral resources or reserves of a mineral body or layer, wherein the first database (**BDS**) is made to contain data on the intersections of the bores with said mineral body or layer, this database comprising:

- data of coordinates defining the intersection of each bore (s1, s2) with the mineral body or layer, wherein the coordinates can either define a single point determining the centre of the body at said bore, or an interval determining the beginning and the end of the three-dimensional body at said bore, and
- data on the physico-chemical properties of the mineral body or layer (data 1, data 2) at each bore (s1, s2).

12.(Original) Method according to claim 11, wherein in step b), defining the first surface (**T1**) is made by forming linked triangles between the median points of the intersection of each bore (s1, s2) with the mineral body or layer, by using the centres of the intersections of the bores with the mineral layer, the information on any outcrops of the layer and geological interpretation regarding the spatial location of the layer, whereby a set of points and lines are defined located on a central surface of the mineral body or layer, and using these points and lines, so as to form a surface by triangulation, providing a set of linked triangles in the space, whereby sufficient points and lines are added so that the surface generated by triangulation is a faithful
representation of the centre of the mineral layer or body and covers the entire area to be studied.

13.(Currently Amended) Method according to ~~any of claims~~ claim 11 ~~and 12~~, wherein the cluster of points (**NPS**) is generated applying the following steps:

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- an algorithm is used to fill in the first surface (**T1**) with points that are more or less equidistant to one another,
- the distance between the points is defined according to a calculation detail required so that its final three-dimensional representation agrees with an initial interpretation of the layer,
- whereby, depending on the algorithm used, the real distance between the points is not necessarily always the same.